

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P881528

Luminaire Tested: **NAV-SB1A-722-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881528  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-722-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

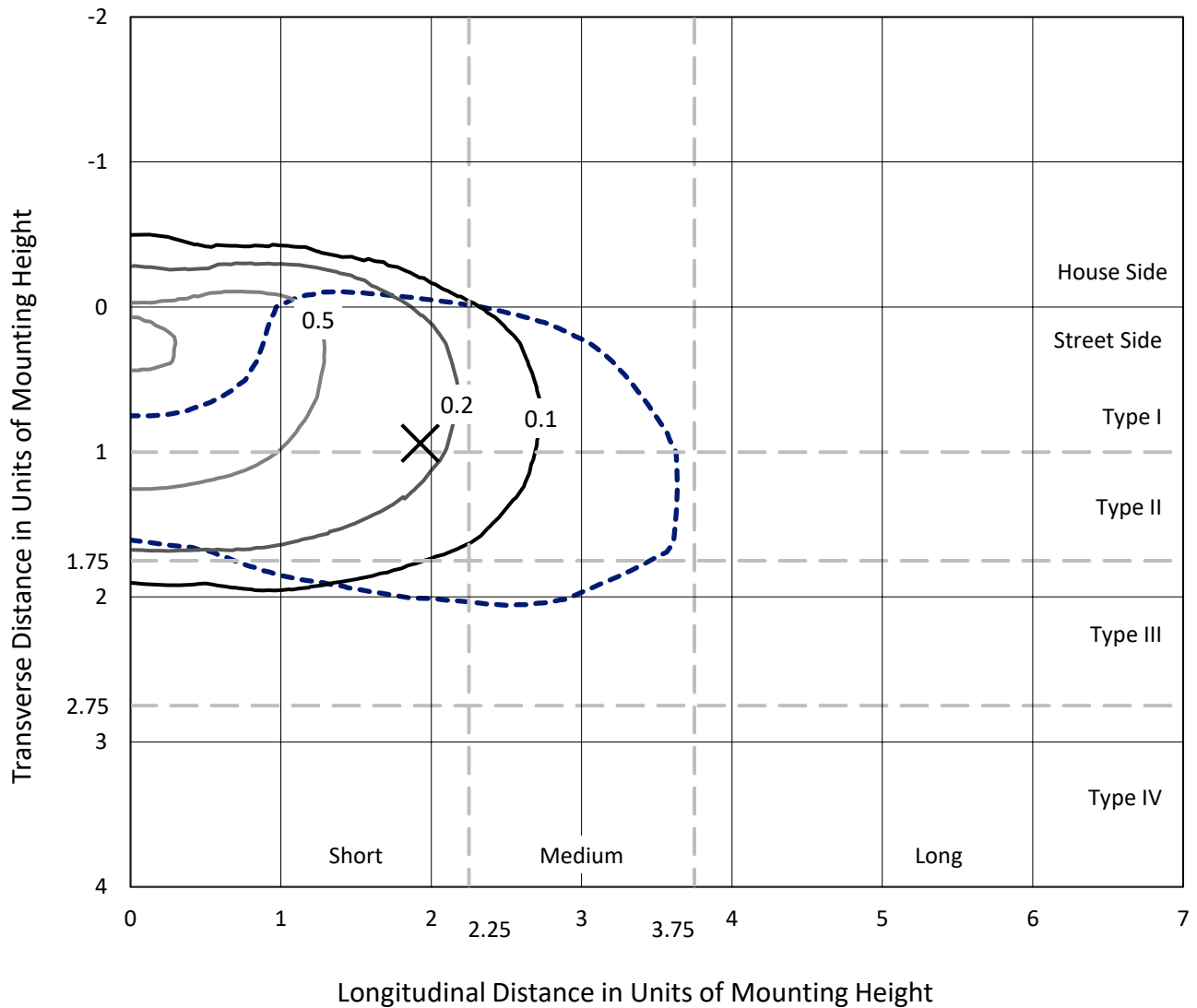
Lumens per Lamp: N/A  
Luminaire Lumens: 2806 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

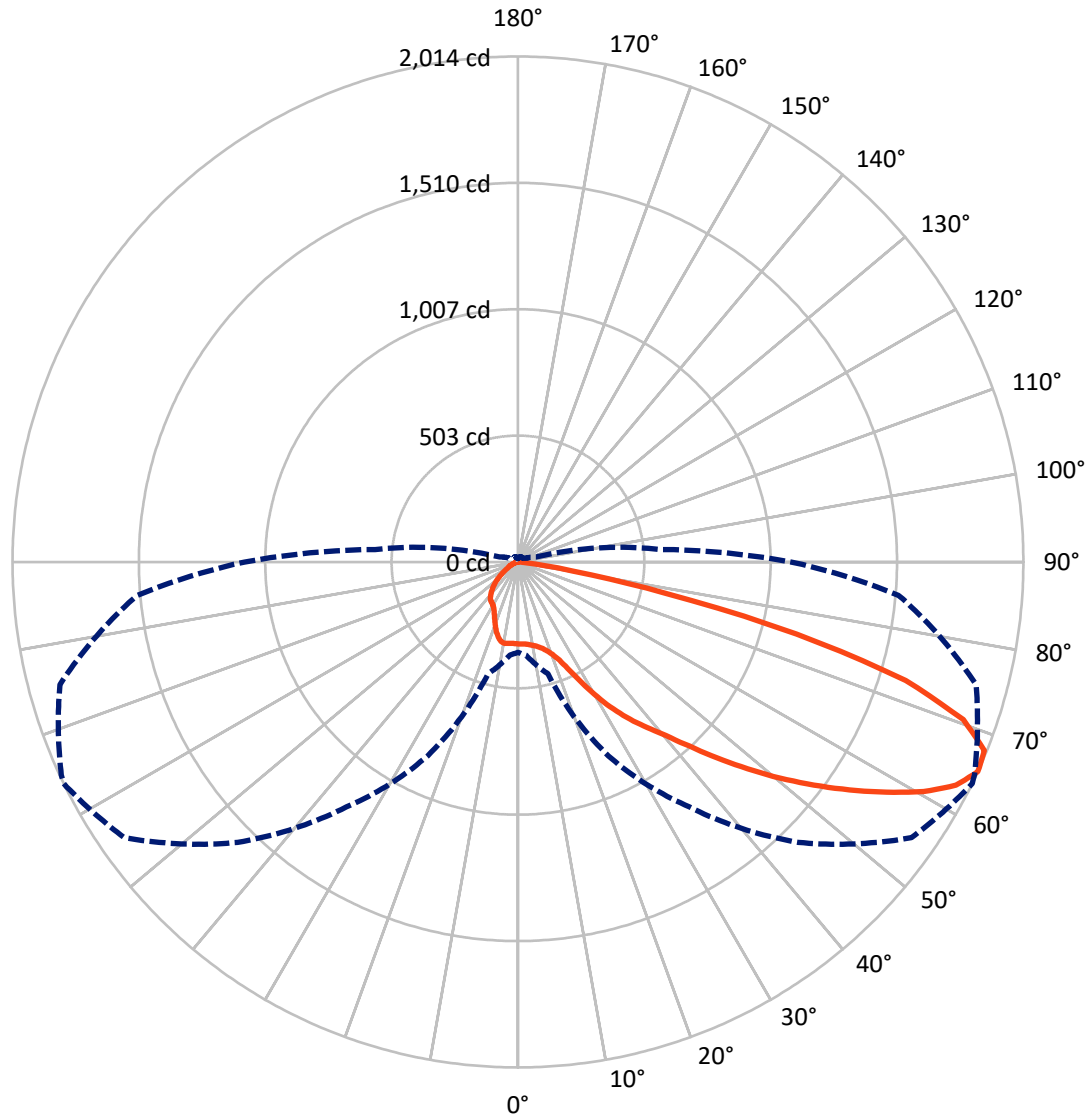
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	375.2	0.0	375.2
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	2430.7	0.0	2430.7
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	2806.0	0.0	2806.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.1	1.1
10°-20°	81.7	2.9
20°-30°	154.8	5.5
30°-40°	313.1	11.2
40°-50°	533.5	19.0
50°-60°	725.5	25.9
60°-70°	681.2	24.3
70°-80°	272.9	9.7
80°-90°	13.2	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2806.0	100.0
0°-180°	2806.0	100.0

**Coefficient of Utilization**



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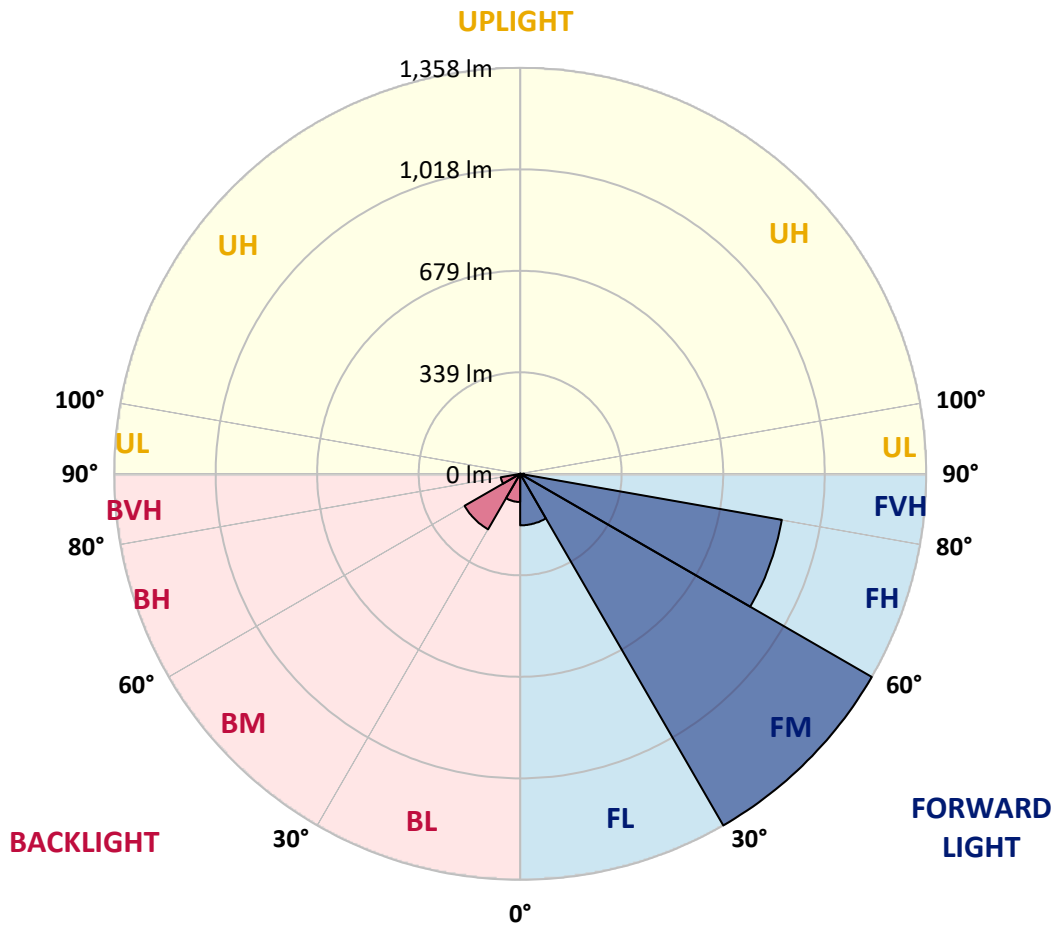
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	172.3	6.1			
FM (30°-60°)	1357.5	48.4			
FH (60°-80°)	888.3	31.7			G1/1800
FVH (80°-90°)	12.6	0.4			G1/100
BL (0°-30°)	94.2	3.4	B0/110		
BM (30°-60°)	214.5	7.6	B0/220		
BH (60°-80°)	65.9	2.3	B0/110		G0/110
BVH (80°-90°)	0.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	325.2	327.5	326.9	326.4	326.2	326.6	326.7	326.6	326.6	326.6	326.7
5°	319.0	320.9	320.9	322.2	324.1	326.4	328.1	328.4	328.8	329.4	329.2
7.5°	307.2	308.7	309.8	314.1	318.8	324.9	329.9	332.6	333.0	335.0	335.8
10°	299.1	301.0	302.9	307.4	314.1	323.2	331.8	338.2	339.2	344.0	346.3
12.5°	298.7	300.6	303.0	307.9	315.8	325.4	336.0	345.2	346.9	354.0	358.7
15°	302.7	304.9	307.2	313.2	321.7	333.3	344.6	356.1	357.8	367.9	373.0
17.5°	310.8	313.8	315.5	321.5	330.5	343.5	358.3	371.5	373.0	384.9	391.3
20°	326.7	330.3	330.9	335.8	344.6	358.5	376.2	392.6	394.5	408.0	415.2
22.5°	359.9	364.9	360.4	362.9	370.8	384.7	403.9	424.6	427.2	442.6	449.0
25°	418.2	425.3	413.6	409.5	412.9	427.4	451.5	477.6	480.6	493.0	496.2
27.5°	532.7	523.5	505.8	488.5	478.4	486.6	513.7	546.1	549.8	561.9	558.1
30°	658.6	650.5	626.6	588.2	564.1	562.8	587.8	624.0	628.3	639.8	628.3
32.5°	784.6	776.9	750.9	703.7	662.0	641.3	658.6	698.6	700.9	708.2	691.3
35°	908.6	900.7	874.7	826.4	775.0	728.0	724.6	769.7	770.5	778.2	753.0
37.5°	1033.3	1026.7	999.0	951.6	901.0	836.1	804.7	837.1	838.0	845.5	819.4
40°	1122.3	1125.1	1106.1	1069.4	1025.9	955.0	894.6	908.7	903.1	915.7	900.1
42.5°	1198.6	1204.3	1187.7	1169.3	1144.1	1081.6	1006.0	1003.6	994.5	1001.3	985.1
45°	1264.6	1269.4	1254.5	1250.2	1249.6	1205.8	1127.7	1113.0	1100.4	1099.1	1079.7
47.5°	1288.9	1297.9	1304.3	1318.8	1347.0	1328.6	1253.6	1230.8	1216.7	1206.3	1175.7
50°	1298.1	1307.7	1329.5	1371.7	1438.5	1446.4	1378.8	1353.2	1335.9	1317.1	1272.0
52.5°	1285.7	1302.8	1332.2	1403.1	1500.0	1540.8	1499.0	1476.6	1456.9	1426.2	1359.3
55°	1212.5	1229.7	1289.7	1402.7	1530.6	1607.0	1612.6	1602.7	1580.5	1532.1	1429.8
57.5°	1058.3	1083.7	1178.7	1354.9	1530.1	1664.0	1724.0	1731.2	1706.3	1637.1	1485.3
60°	844.6	879.0	994.9	1249.0	1482.9	1694.9	1821.6	1857.4	1831.0	1740.6	1530.3
62.5°	589.3	629.2	738.9	1083.1	1374.9	1672.7	1892.9	1959.0	1939.0	1833.1	1547.6
65°	359.5	372.3	460.7	852.3	1191.3	1579.7	1914.9	2013.9	2007.3	1889.7	1522.0
67.5°	239.5	250.2	275.6	584.5	924.7	1394.1	1862.3	2004.3	2006.2	1880.5	1428.3
70°	144.3	153.5	170.0	339.9	599.3	1103.4	1699.2	1882.0	1892.9	1757.3	1250.7
72.5°	59.4	65.6	80.7	154.1	310.4	700.3	1353.1	1615.8	1641.2	1477.6	959.9
75°	33.7	36.9	47.4	77.3	134.7	326.4	819.6	1147.1	1184.5	1018.4	577.5
77.5°	22.4	23.9	30.7	50.0	75.8	111.4	350.3	597.6	669.1	556.2	250.0
80°	15.0	16.4	21.1	33.5	49.3	47.8	111.5	221.4	272.4	191.1	60.9
82.5°	10.2	10.3	15.0	22.0	31.2	23.1	32.9	68.8	86.5	55.3	23.1
85°	5.8	5.6	11.1	12.8	13.9	9.6	10.0	20.7	27.1	23.3	13.2
87.5°	0.8	1.1	4.3	3.4	1.9	2.1	2.1	3.6	5.3	5.6	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	326.7	326.6	326.0	325.4	324.1	323.4	323.7	323.4	323.2	323.4	324.1
5°	329.2	328.6	327.1	325.2	322.6	319.4	317.3	314.3	311.5	309.8	310.2
7.5°	335.8	335.2	333.1	327.9	319.4	306.1	293.8	283.1	275.0	270.3	270.5
10°	346.3	345.4	342.2	330.5	308.3	279.2	254.9	234.8	221.6	215.4	214.8
12.5°	358.7	357.6	351.9	328.1	287.2	241.7	208.2	185.9	173.6	168.2	167.6
15°	373.4	371.9	360.8	316.4	256.6	200.3	169.7	152.9	145.0	140.1	140.3
17.5°	391.6	389.0	367.4	298.9	223.3	168.7	146.0	133.4	126.4	121.7	121.3
20°	415.3	411.0	372.6	278.0	192.6	148.8	130.0	119.4	114.2	110.0	109.3
22.5°	448.4	442.2	379.0	255.5	171.0	135.1	118.1	110.4	106.1	101.4	100.6
25°	489.5	482.1	386.9	234.6	156.1	123.2	109.5	103.1	98.0	92.5	92.0
27.5°	546.8	533.7	396.3	217.5	143.3	113.1	101.6	94.4	88.6	84.1	83.1
30°	610.8	589.2	404.6	207.1	131.7	103.6	91.2	84.1	78.6	75.4	74.9
32.5°	671.4	642.0	410.1	202.6	121.1	92.9	79.9	72.2	68.1	67.2	67.7
35°	728.5	689.8	409.5	198.3	111.7	82.2	68.8	60.9	57.7	58.3	58.3
37.5°	794.4	740.8	405.6	191.5	104.0	72.4	59.3	52.3	49.5	49.7	50.4
40°	870.9	799.6	403.1	178.7	95.6	63.4	51.4	45.7	43.6	42.9	42.7
42.5°	952.6	856.6	403.5	164.2	85.0	55.3	45.9	41.2	39.3	38.8	38.6
45°	1034.6	911.0	404.1	149.2	73.9	49.1	41.9	38.0	36.9	36.1	36.1
47.5°	1111.7	957.3	393.5	133.0	63.0	44.4	38.8	36.1	35.2	34.2	34.2
50°	1183.6	988.1	368.1	114.2	54.4	40.6	36.3	34.4	33.5	32.5	32.5
52.5°	1239.4	993.0	326.2	94.8	48.3	37.8	34.8	33.1	32.0	31.0	30.8
55°	1264.3	962.4	266.5	76.7	43.6	35.4	33.3	31.6	30.3	29.3	29.2
57.5°	1257.9	897.8	207.9	61.7	39.1	32.9	31.4	30.3	28.8	27.3	27.1
60°	1226.5	811.5	156.7	51.4	35.0	30.3	29.3	28.4	26.3	24.1	23.7
62.5°	1172.1	703.0	111.7	42.5	30.5	27.3	26.9	26.1	23.1	19.0	18.6
65°	1089.0	571.1	75.2	35.4	26.1	23.9	24.1	22.8	18.8	14.1	13.7
67.5°	967.4	417.6	48.2	29.0	21.8	19.9	20.1	19.4	16.0	12.0	11.5
70°	812.6	276.5	31.4	22.0	17.5	15.4	16.6	16.7	13.5	9.8	9.4
72.5°	595.7	163.3	22.0	16.4	12.8	10.7	13.5	13.9	10.9	7.3	7.0
75°	339.5	77.5	16.6	11.9	7.9	7.5	10.5	10.5	7.5	4.9	4.5
77.5°	142.6	32.4	11.7	7.7	4.5	4.3	7.1	6.6	3.8	2.3	2.3
80°	41.2	14.5	6.2	3.8	1.9	1.7	2.8	2.1	0.9	0.4	0.4
82.5°	16.2	6.4	2.4	1.5	0.8	0.8	0.4	0.0	0.0	0.0	0.0
85°	9.6	2.6	1.1	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)